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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/577,572

04/27/2006

Manfred Aulbach

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EXAMINER

JUSKA, CHERYL ANN

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/577,572	Applicant(s) AULBACH, MANFRED	
	Examiner Cheryl Juska	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 November 0204.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: The specification does not provide subheadings according to 37 CFR 1.77(b). Appropriate correction is required.

Information Disclosure Statement

2. The listing of references in the International Search Report is not considered to be an information disclosure statement (IDS) complying with 37 CFR 1.98. Additionally, the listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office. Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-3 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claims contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification as originally

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filed does not enable the hydrodynamic water needle-punching (hydroentanglement) of a hot melt (thermoplastic) film. While one skilled in the art would understand how to make and use a backing support layer hydroentangled with a layer of hot melt powder or fusible staple fibers, one does not readily understand how to make and use a backing support layer hydroentangled with a film layer.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-3 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

8. Regarding claim 1, the phrase “web-like goods” renders the claim indefinite because the claim includes elements not actually disclosed (those encompassed by “-like”), thereby rendering the scope of the claim unascertainable.

9. Claim 1 recites the limitation “the pile-forming yarns” in line 5 of the claim. There is insufficient antecedent basis for this limitation in the claim. Note, as written, the claim may be drawn to merely a “web-like goods” not necessarily even containing pile yarns.

10. Claim 3 is indefinite for the use of the closed transitional language “consisting of,” while subsequently adding further components to the claimed product. Specifically, applicant’s claim is drawn to a “web goods *consisting of*” a support layer and pile yarns, “characterised in that an

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intermediate layer...is provided on the back of the support layer...and a nonwoven placed thereover.”

11. Claim 3 is also indefinite because it is unclear if applicant really intends to claim the web goods in a state comprising “molten” powder, fibers, or film. Typically, in a final product, molten thermoplastic layers are not actually molten, but have been cooled and solidified. Additionally, upon being molten and then cooled, powders and fibers are generally not still in said powder or fiber form in a final web goods product.

12. Claim 3 is also indefinite for the use of the term “chemical fibers.” The scope of said term is not clear since all fibers can be identified as some type of “chemical” composition. Are the chemical fibers the same or different as the later recited fusible fibers?

13. Claim 3 recites the limitation “the carpet backing” and “the carpet” in line 13 of the claim. There is insufficient antecedent basis for these limitations in the claim. Note the claim is drawn to merely a “web goods” not a carpet.

Claim Interpretation

14. For the purpose of examination, claim 1 is interpreted as being drawn to a method of forming a carpet comprising pile-forming yarns incorporated into a backing support layer (e.g., tufted primary backing), an intermediate layer of a hot melt powder or fusible staple fibers (i.e., adhesive backcoat), and a nonwoven secondary backing. The method steps of claim 1 include (a) a first hydrodynamic water needle-punching step (hydroentangling step) to bond the intermediate layer to the tufted primary backing, (b) a second hydroentangling step to bond the nonwoven secondary backing to the tufted primary backing layer and intermediate layer

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composite, and (c) a heat treatment step to melt the hot melt powder or fusible fibers. Claim 2 limits the heat treatment step to occurring between the first and second hydroentangling steps.

15. Claim 3 is interpreted as being drawn to a web goods comprising (a) pile-forming yarns, (b) a support layer, (c) an intermediate layer, and (d) a nonwoven secondary backing, wherein said web goods is made by a process of (a) inserting the pile-forming yarns into the support layer (e.g., forming a tufted primary backing), (b) applying the intermediate layer of a hot melt powder or fusible fibers to the tufted primary backing, (c) hydroentangling the tufted primary backing and the intermediate layer together, (d) applying the secondary nonwoven backing, (e) hydroentangling the nonwoven to the hydroentangled tufted primary backing and intermediate layer, and (f) heat treating the web goods to melt the hot melt powder or fusible fibers.

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE-A 100 56 180.

Applicant admits “it is known to provide the backing of the support layer with a nonwoven and bond this to the support layer and the backing fibres of the pile fibres by means of hydrodynamic needle-punching.” (abstract, page 1 of the specification, 1st paragraph citing EP 1 081 263.) Applicant also states, “It is furthermore known to apply an intermediate layer to the

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support layer between support layer and nonwoven comprising at least partly fusible fibres and to bond the two by means of hydrodynamic needle punching to the carpet backing.” (abstract, paragraph spanning pages 1- 2 of the specification citing DE-A 42 44 172 and DE-A 100 56 180.) [Note DE-A 42 44 172 appears to be an erroneous citation since said patent number is drawn to the non-analogous art of a lock cylinder.]

In the absence of an English translation of the DE-A 100 56 180 reference, the PCT 409 form is relied upon for a further teaching of the reference. Specifically, the English language translation of the International Preliminary Report on Patentability (Form PCT/IPEA/409) filed in the present US application on 04/27/06 describes DE-A 100 56 180 as hydroentangling the intermediate layer and secondary nonwoven layers to the back of the support layer with 1 to 3 hydroentanglement passes (409, Box V., section 2.2). Note an English translation has been ordered and should be available for the next Office Action.

Thus, the cited DE ‘180 reference teaches the presently claimed invention with the exception that the first hydroentanglement passes occurs prior to application of the nonwoven secondary backing. However, it would have been readily obvious to one skilled in the art to employ separate the multiple hydroentanglement passes with the addition of said secondary backing. In doing so, the first hydroentanglement pass would focus on securing or mixing the intermediate layer with the tufted primary backing, while the second pass would focus on integrating the nonwoven secondary backing into the carpet. Such modification of the DE ‘180 reference would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

Additionally, it would have been obvious to one of ordinary skill in the art to apply the heat treatment step in between the two hydroentanglement passes. Specifically, the first hydroentanglement pass and subsequent heating step would secure the pile yarns into the primary backing before the addition of the secondary backing, which provides a finished backing as well as further enhancing the anchoring of the pile yarns. Such a modification of the DE '180 reference would have yielded predictable results to one of ordinary skill in the art at the time of the invention. Therefore, claims 1-3 are rejected as being obvious over the prior art.

Conclusion

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheryl Juska whose telephone number is 571-272-1477. The examiner can normally be reached on Monday-Friday 10am-6pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached at 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

20. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Cheryl Juska/
Primary Examiner
Art Unit 1794

cj
June 25, 2008